

Super Finishing Wheels for Mirror Finishing of Carbide Tools on CNC Grinding Machines



Specifications:

1A1 100 10 6 Super Finishing

Operation:	Super Finishing
Machine:	CNC grinding machine
Workpiece:	Drills Ø 8 : 20
Material:	Tungsten Carbide

Dressing:

Stick:	White
Wheel Speed:	< 5 m/s
Rotation:	Counter Clockwise

Machine:

Brand:	Walter, Schneeberg, Isog, Saacke, Haas, Cuoghi vb.
Spindle:	-
Coolant:	Oil (microfiltration with chiller recommended)

Grinding Parameters:

Wheel Speed:	22 m/s
Depth of pass:	0,05 mm max.
Feed:	50 mm/min (depending on drill or endmill geometry)

Parameters	Required Performance	Results
Total Removal	0,1 mm	0,03 mm
Number of Workpiece	300	300
Surface Finish	Ra 0,1	Ra 0,04
Dressing Interval	50 pieces	200 pieces
Working Time	1'	1'

Notes:

1. Super finishing wheel can remove few microns only so it is recommended to apply flute grinding with P109 or P110 beforehand.
2. Geometric specifications of the super finishing wheel and roughing diamond wheel must be the same.
3. Wheel wear: < 0,01 mm (Ø 8 mm) after 100 pieces
4. The depth of pass depends on the diameter of workpiece tool.